

Notice of Allowability

Application No.

09/640,405

Examiner

Nelson D. Hernandez

Applicant(s)

CRAWFORD ET AL.

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 23 December 2004.
2. ☒ The allowed claim(s) is/are 1-9, 14 and 16-28.
3. ☒ The drawings filed on 17 August 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Allowable Subject Matter

1. **Claims 1-9, 14 and 16-28** are allowed.
2. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 1 and 3, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest producing a modified video signal consisting of a continuous sequence of the first and second fields or frames to selectively applying said modified video signal to a video display apparatus whereby to cause said apparatus to display said captured optical image according to the first or second fields or frames contained in said modified signal.

Takahashi, 2002/0071044 A1 discloses a method of producing a video recording with improved dynamic range comprising: providing a video sensor (Fig. 1: 103) capable of converting an optical image into a video signal comprising a sequence of video fields or frames (See fig. 3) representing the optical image (Page 2, ¶ 0045); operating said video sensor to capture an optical image and simultaneously varying the amount of light (Page 6, ¶ 0072) received by said video sensor during the time frame of each video field or frame so that the resulting video signal representing said captured optical image will constitute a sequence of video fields or frames comprising at least first and second fields or frames representing substantially different exposure values of the captured image occurring repetitively in said sequence (Page 3, ¶ 0050; page 6, ¶ 0072; see also fig. 12 for field memories). However, Takahashi fails to teach or reasonably suggest

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producing a modified video signal consisting of a continuous sequence of the first and second fields or frames to selectively applying said modified video signal to a video display apparatus whereby to cause said apparatus to display said captured optical image according to the first or second fields or frames contained in said modified signal.

Regarding claim 17, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest processing the video signal output to provide a first modified signal that defines a continuous sequence of first fields or frames, and a second modified signal that defines a continuous sequence of second fields or frames and utilizing said first and second modified video signals to produce separate displays of said captured optical image according to the exposures represented respectively by said first and second fields or frames.

Takahashi, 2002/0071044 A1 discloses a method of producing a video recording with improved dynamic range comprising: providing a video sensor (Fig. 1: 103) capable of converting an optical image into a video signal comprising a sequence of video fields or frames (See fig. 3) representing the optical image (Page 2, ¶ 0045); operating said video sensor to capture an optical image and simultaneously varying the amount of light (Page 6, ¶ 0072) received by said video sensor during the time frame of each video field or frame so that the resulting video signal representing said captured optical image will constitute a sequence of video fields or frames comprising at least first and second fields or frames representing substantially different exposure values of the captured image occurring repetitively in said sequence (Page 3, ¶ 0050; page 6, ¶ 0072; see also fig. 12 for field memories). However, Takahashi fails to teach or reasonably suggest

processing the video signal output to provide a first modified signal that defines a continuous sequence of first fields or frames, and a second modified signal that defines a continuous sequence of second fields or frames and utilizing said first and second modified video signals to produce separate displays of said captured optical image according to the exposures represented respectively by said first and second fields or frames.

Regarding claims 4, 7, 9, 14, 18, 19, 22, 25, 26 and 28, the main reason for indication of allowable subject matter is because the prior art fails to teach or reasonably suggest deriving from the resulting video signal a modified video signal comprising a continuous sequence of only the first video field or frames or a continuous sequences of only the second video field or frames.

Takahashi, 2002/0071044 A1 discloses a method of producing a video recording with improved dynamic range comprising: providing a video sensor (Fig. 1: 103) capable of converting an optical image into a video signal comprising a sequence of video fields or frames (See fig. 3) representing the optical image (Page 2, ¶ 0045); operating said video sensor to capture an optical image and simultaneously varying the amount of light (Page 6, ¶ 0072) received by said video sensor during the time frame of each video field or frame so that the resulting video signal representing said captured optical image will constitute a sequence of video fields or frames comprising at least first and second fields or frames representing substantially different exposure values of the captured image occurring repetitively in said sequence (Page 3, ¶ 0050; page 6, ¶ 0072; see also fig. 12 for field memories).

Haga, JP 03179889 A teaches an automatic frame/field switching unit for imaging systems (Fig. 1), wherein the switching unit comprises first and second memories (Fig. 1: 11 and 12) for storing the first and second received fields or frames from an imaging system output and a selector (Fig. 1: 14) that when a detected signal of the absence of blur is received from the motion detector (Fig. 1: 13), said selector outputs the digital video signal in which the pixel data stored in the first and second field memories are synthesized, and when a detected signal of the existence of blur from the motion detector, the selector selects the pixel data of either the first field memory or the second field memory and outputs the digital video signal in which the lines of the pixel data are synthesized so that they may be displayed twice, providing images without blur (Translation, page 4, lines 6-20).

However, the teachings of Takahashi and Haga, either along or in combination fails to teach or reasonably suggest deriving from the resulting video signal a modified video signal comprising a continuous sequence of only said first video field or frames or a continuous sequences of only the second video field or frames.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (571) 272-7311. The examiner can normally be reached on 8:00 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber can be reached on (571) 272-7308. The fax phone

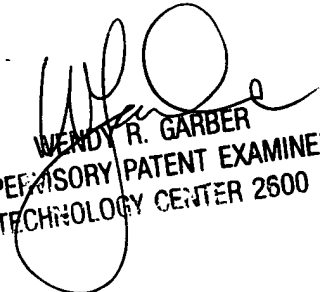
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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nelson D. Hernandez
Examiner
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NDHH
May 13, 2005


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